

Oil Firms Plant Grass on Slope

ANCHORAGE, Alaska, Aug. 12—The two companies which announced a major oil discovery on the North Slope of Alaska just a year ago are cooperating in a large-scale experimental seeding effort to try to introduce new and hardy varieties of grasses on the tundra of that frozen Arctic area.

In their joint effort, Atlantic Richfield Company and Humble Oil & Refining Company aim to try to increase the fertility of the soil and find a seed or seeds which will "take" in the severe climatic conditions of the Slope.

They want to establish the same vital ground cover as the tundra in areas which could be subject to artificial disturbance due to oilfield activity. The companies plan to make their findings available to government agencies and others operating in the North.

Atlantic Richfield is operator for the project.

The tundra, it was explained, acts as an insulating medium which keeps underlying layers of silt and water frozen throughout the summer. Disturbance of the tundra, which has a poor fertility factor and very short growth cycle, could cause the substrata to thaw and start surface erosion.

Weeks of planning and study by officials of three major Alaskan based agencies and the ARCO Chemical Company division of Atlantic Richfield preceded the start of the tests, regarded as a pioneering effort in the field of conservation.

Said Ralph F. Cox, Alaskan manager of Atlantic Richfield:

"This is an all-out effort, in cooperation with the Agricultural Experiment Station and the Institute of Arctic Biology, both of the University of Alaska, and the Arctic Research Laboratory

at Point Barrow, to try to grow and maintain a good cover which is even hardier than native tundra, and at the same time provide more and better feed for area wildlife."

Scores of varieties of cold weather-hardy seeds were reviewed and analyzed, along with extensive soil tests of the composition of the tundra to arrive at the final selection of seeds and fertilizers.

While those seeds selected are foreign to the tundra, they flourish in the frigid climate of other states, as well as in the Canadian and Russian Arctic.

Thus, in recent days agronomists sowed hundreds of pounds of 13 carefully selected varieties of grasses and sedges over acres of tundra in the Prudhoe Bay area of the North Slope.

Each seed variety was planted in two sections—one with fertilizer the other without, for control purposes.

In addition, a few small plots were sowed with seeds treated with various concentrations of a special growth inducing hormone—gibberellic acid.

The grass seed was sowed by hand from the ground, but the fertilizer—special mixes designed to counter the deficiencies noted in the soil tests—was spread by helicopter from 600 pound capacity bins suspended from the under-bellies of the aircraft.

The fertilizer came from ARCO's Fort Madison, Iowa fertilizer producing complex.

The job took three days. The agronomists operated from a special camp set up near Prudhoe Bay, which is 390 miles north of Fairbanks.

If any of the seeds take, there should be signs of growth soon.

"But," said Cox, "it will be

approximately this time next year before we know which seeds, if any, survived the severe Arctic winter. If only one seed can be made to flourish in that intense cold, we feel we will have made a major contribution to environmental conservation in Alaska."